

A New Name for *Buccinum tenuum* GRAY, 1839, preoccupied

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It is always a source of confusion when a name which has achieved common usage and is universally understood has to give way to a thoroughly unfamiliar one. In such cases the way is open for an appeal to the International Commission on Zoological Nomenclature, but sometimes even this course is not entirely practical. Such an instance is afforded by the well known *Buccinum tenuum* Gray (Zool. Beechey's Voyage, p. 128, pl. 36, f. 19, 1839), which name is twice preoccupied.

The first use of this nomenclatorial combination was by Schröter (Wiedemann's Archiv Zool., v. 4, pt. 2, p. 76, 1805). The description is not very satisfactory because it is not accompanied by an illustration or by a reference to a previous publication. Further, there is no mention of a related species with which it might be compared, nor is its habitat given. We do not even know whether its placement in the genus *Buccinum* is correct or not. Yet the name cannot be considered a "nomen nudum" because the description is about half a page in length. It is not adequate to make an identification possible, but it is adequate to preclude the use of the name by later writers, and if Schröter's type material should ever turn up, his use of the name would be entitled to priority over the others.

The second use of the name was by Wood (Index Testac., Suppl., p. 12, pl. 4, f. 5). This well executed figure suffices to show that this species is not a *Buccinum* at all, but a *Cassis*. The first author to recognize its true generic affiliation seems to have been Kiener (Spéc. Gén. Iconogr. Coq. Viv., v. B, p. 17, pl. 8, f. 14, 1835). Kiener called it *Cassis massenae*, which appears to be the correct name by which it should be called.

The third use of the name was by Gray (loc. cit.), and it is quite a problem to select a name for it out of the many which have been cited in

its synonymy by later writers. The first of these potential synonyms is *Buccinum scalariforme* Beck (Naturh. Tidsskrift, v. 4, pt. 1, p. 89, 1842). Beck was not proposing a new name for an old species but was describing a new species. Tryon (Man. Conch., ser. 1, v. 3, p. 184, 1881) stated these two species had been synonymized but that he personally felt that it was more likely that Beck's species was a synonym of *Sipho kroyeri* Möller (Index Moll. Grön., p. 15, 1842).

Then Stimpson, in a revision of the family Buccinidae, published in 1865, which I am unable to locate, allowed Gray's name to stand but placed in its synonymy *Buccinum tortuosum* Reeve (Conch. Icon., v. 3, *Buccinum*, pl. 14, f. 113, 1847) which, according to Stimpson, was based upon a deformed specimen.

And then Jeffreys (Ann. Mag. Nat. Hist., ser. 5, v. 6, p. 423, 1880) united in a single species *Buccinum tenuum* Gray, *Buccinum tortuosum* Reeve, and *Buccinum ochotense* Middendorff (Beitrag. Malac. Rossica, pl. 2, no. 19, 1849). But Tryon (loc. cit., p. 184) believed the identity of these to be uncertain. He identified Reeve's species as *Sipho kroyeri* Möller and that of Middendorff as *Buccinum striatum* Sowerby (Rec. Gen. Sci., v. 1, pt. 2, p. 134, 1835).

Another name mentioned by Tryon as possibly available is "var. *elatior*" Middendorff (loc. cit., pt. 2, p. 461, pl. 5, f. 2, 1849, and Reise . . . Sibirien, v. 2, pt. 1, p. 228, pl. 8, f. 1, 1851). I do not have access to either of these works but have obtained the references from Mrs. Nettie MacGinitie (Proc. U. S. Nat. Mus., v. 109, pp. 122-124, 1959) whose testimony I consider to be reliable. Mrs. MacGinitie believes that these two uses of the name by Middendorff apply to forms that are specifically distinct and for them she uses the names *Neptunea middendorffiana* MacGinitie (loc. cit.) and *Neptunea heros* Gray (Proc. Zool. Soc. London,

v. 18, pt. 18, pp. 14-15, pl. 7, 1850) respectively. It should be observed that neither Middendorff nor Mrs. MacGinitie referred either of these two species to the genus Buccinum.

Because neither Carpenter (Report Brit. Assn. for 1856, published 1857) nor Sherborn (Index Animalium) took notice of the name elatior, the implication is that there was some irregularity in the way in which it was proposed. Reference to Middendorff's work confirms this. Actually, the name has no standing in zoological nomenclature at all for it was proposed in polynomial form. According to Mrs. MacGinitie, the two publications by Middendorff are as follows:

1849. Tritonium (Fusus) antiquum var. communis obsoletior forma elatior.

1851. Tritonium (Fusus) antiquum var. communis insignior forma elatior.

Inspection reveals a fundamental difference between these polynomials and those of Martini and Chemnitz (Neues Syst. Conchyl. Cab., v. 1-11, 1768-1795) and those of the pre-Linnaean writers, such as Rumphius, Klein, and Adamson. In these, the first word is the genus, the remainder of the polynomial forms a descriptive phrase that does duty as a specific name. This is why the International Commission on Zoological Nomenclature retained the generic names used by Martini and Chemnitz when they suppressed the specific names given by these writers (Opinion 184, v. 3, pp. 25-36, 1944); the generic names were not suppressed until 14 years later (Official Index of Rejected and Invalid Works in Zoological Nomenclature, first installment, p. 5, footnote, 1958). If Middendorff's polynomials had been of the same type, it would be necessary to reject all of his names as published in a work not consistently binomial, which would be most unfortunate, as Middendorff was a careful scholar and most of his names have been accorded the acceptance which they merit. But Middendorff's polynomials are not parallel to those of the other writers; they do not form descriptive phrases but each term represents a successive grade in the process of differentiation of intraspecific forms. Each term is a separate nomenclatorial unit; those which can be interpreted as having the rank of a taxonomic category recognized by the Commission are available for that purpose; those which apply to groups lower in rank have no more standing in zoological nomenclature than the names of the mutations of Drosophila melanogaster and are available to anyone who wishes to validate them.

In this case Tryon validated the name for a variety of Buccinum tenue Gray with evanescent ribs; he credited it to Middendorff although

Middendorff himself used it to designate a variety of Tritonium antiquum, now generally known as Neptunea antiqua but originally described as Murex antiquus Linnaeus (Syst. Nat., Tenth ed., p. 754, no. 486, 1758).

Dall (Proc. U. S. Nat. Mus., v. 9, p. 215, 1886) accepted the name elatior in the sense in which Tryon used it but did not describe it. Later (Ibid., v. 56, p. 324, 1919) he described two varieties of Buccinum tenue Gray to which he gave the names rhodium and hyperum. If for any reason the name elatior be rejected, the varietal names given by Dall will be next in line, but in that case a new varietal name will be needed for the form which Gray considered typical.

Finally Dall (Bull. U. S. Nat. Mus. 112, p. 97, 1921) accepted the name elatior as a variety of Chrysodoma satura Martyn (Figs. Non-descript Shells, table 2, f. 47, 1784). This is in accordance with Middendorff's intention, for Martyn's species is very closely allied to Neptunea antiqua Linnaeus, and it is not impossible that Martyn may have thought them identical. But it is not in accordance with Tryon's idea, since he applied the name to a species that some authorities would place in a different genus, if not even in a different family.

The earliest names in the synonymy of Buccinum tenue Gray are of uncertain meaning, if one can judge by the different interpretations placed upon them by later writers. Whether any one of them is available can be determined only by an examination of the holotypes, and it is not impossible that the holotypes may no longer be in existence. Pending the time when an examination of these species can be made, we must give tentative acceptance to the earliest available name whose application is certain beyond possibility of reasonable doubt. The oldest such name appears to be elatior Tryon 1880. The availability of this name is not clouded by the earlier elatior of Middendorff since this was not proposed in accordance with the rules.

Dall's use of the name in 1921 appears to be an attempt to do belated justice to Middendorff, but it came too late. Tryon had already validated the name for a different species (and Dall had concurred in the use of the name). The species called Buccinum tenue by Gray must therefore be Buccinum elatior Tryon until such time as new evidence to invalidate the use of this name be brought to light.

Since the gender of Buccinum is neuter, the specific name should be used in the neuter form also, which would make the name Buccinum elatius.